

Amendments to the Specification:

At page 9, please replace the paragraph beginning at line 18 with the following amended paragraph:

Fig. 7 is a schematic representation of the transmembrane spanning region and the conserved amino acids in the *Arabidopsis thaliana* GALAT gene family. The relative position of the strictly conserved residues among the members of the proposed GALAT family is numbered as for JS36 (i.e., GALAT1). The striped region from residues 22-44 represents the predicted transmembrane region. P---CL---L, SEQ ID NO:51; P---L---
--D-D---Q-D---L-----V, SEQ ID NO:52; W-----C, SEQ ID NO:53; H---DN---A-
SVV---S-----V-H---T, SEQ ID NO:54; C-W---G-N---DL-W-----Y-----L, SEQ
ID NO:55; FW---GLG-----H---G---KPW, SEQ ID NO:56.

At page 18, please amend the paragraph beginning at line 8 as follows:

A PSI Blast against GALAT1 gene (JS36) further identified 10 genes that have high sequence identity (23-29%) and similarity (41-51%) to GALAT1 and form a tight cluster of highly similar genes (55-66% identity/67-77% similarity). A Neighbor Joining Tree of our proposed *Arabidopsis* GalAT Superfamily (i.e. the proposed GALAT family and the GALAT-Like family), based on a sequence alignment generated by ClustalX¹²⁸, is shown in Fig. 9. The 10 GALAT-like genes are all significantly smaller, lacking ~200 amino acids in comparison with the GALAT family. Nonetheless, they appear to be targeted to the secretory pathway based on annotation of the genes at the *Arabidopsis* Information Resources. All 10 genes appear to be expressed in *Arabidopsis*, since they are represented by one or more ESTs in the *Arabidopsis* EST collection. The GALAT-like genes also contain some of the same conserved residues as the GalAT family, namely D-D---D---L (SEQ ID NO:57; the predicted "D(x) D" motif) and L-----F-----
W---GLG-----H---G---KPW (SEQ ID NO:58). We group the 10 GALAT-like genes into a family that encode GalATs directly involved in pectin synthesis or GalATs with, as yet, unidentified glycosylating function.